Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-30 **(Cancelled)**

31. **(Currently amended)** A process for alkylation of an aromatic hydrocarbon or isoalkane with an olefin ~~over the~~ using catalysis [[of]] by a solid acid, comprising contacting a reaction material containing an aromatic hydrocarbon or C_4-C_6 isoalkane, C_2-C_{18} monoolefin and a compound containing a strongly electronegative element, which serves as an promoter, with a solid acid catalyst to carry out the alkylation, characterized in that the solid acid catalyst is contacted with a hydrocarbon comprising a hydrogen halide prior to its contact with the reaction material.

32. **(Cancelled)**

33. **(Currently amended)** The process according to claim [[32]]31, wherein said hydrocarbon comprising a hydrogen halide is an aromatic hydrocarbon or isoalkane.

34. **(Previously presented)** The process according to claim 33, wherein said aromatic hydrocarbon or isoalkane comprising a hydrogen halide is the reactant of the alkylation.

35. **(Cancelled)**

36. **(Cancelled)**

37. **(Previously presented)** The process according to claim 33, wherein in said aromatic hydrocarbon or isoalkane comprising a hydrogen halide, the hydrogen halide is present in an amount of 10 to 5000 ppm.

38. **(Previously presented)** The process according to claim 37, wherein said hydrogen halide is present in an amount of 30 to 3500 ppm.

39. **(Previously presented)** The process according to claim 38, wherein said hydrogen halide is present in an amount of 50 to 3000 ppm.

40. **(Previously presented)** The process according to any one of claims 34 and 37 to 39, wherein said hydrogen halide is HF or HCl.

41. **(Previously presented)** The process according to claim 33, wherein said isoalkane comprising a hydrogen halide is one of C_4-C_6 isoalkanes, or a mixture of them.

42. **(Previously presented)** The process according to claim 41, wherein said isoalkane is isobutane.

Claims 43-49 **(Cancelled)**

50. **(Currently amended)** A process for alkylation of an aromatic hydrocarbon or isoalkane with an olefin using catalysis by a solid acid, comprising contacting a reaction material containing an aromatic hydrocarbon or C_4-C_6 isoalkane, C_2-C_{18} monoolefin and a compound containing a strongly electronegative element, which serves as an promoter, with a solid acid catalyst to carry out the alkylation, characterized in that the solid acid catalyst is contacted with a a hydrogen halide prior to its contact with the reaction material~~The process according to claim 31~~, wherein said solid acid catalyst is a supported heteropoly acid catalyst, a supported or unsupported heteropoly acid salt catalyst, a zeolite molecular sieve catalyst, a SO_4^{2-}/oxide super acid catalyst, a supported Brönsted-Lewis conjugate solid super acid catalyst or an oxide or molecular sieve catalyst treated with a Brönsted acid or Lewis acid, and wherein said supported heteropoly acid catalyst consists of a porous inorganic support and a heteropoly acid, wherein the heteropoly acid is represented by the general formula: $H_{8-n}[AM_{12}O_{40}]$, wherein A represents P or Si, M represents W or Mo, and n represents the valence state of A and is 4 or 5; and wherein said supported heteropoly acid salt catalyst consists of a porous inorganic support and a heteropoly acid acid, wherein the heteropoly acid salt is represented by the general formula: $H_{8-n-mx}N_x[AM_{12}O_{40}]$, wherein N is a metal ion selected from alkali metal ions, ammonium ion, alkali

earth metal ions and metal ions of Group IIIA metals, m represents the valence state of the metal ion, x is a number usable in the range $0 < mx < 4$, A represents P or Si, M represents W or Mo, and n represents the valence state of A and is 4 or 5; said porous inorganic support being a conventional porous inorganic support selected from activated carbon, silicon oxide, aluminum oxide, magnesium oxide, titanium oxide, natural or synthetic aluminosilicate zeolite, carbon fiber and natural clay, or mixtures thereof.

51. **(Cancelled)**

52. **(Currently amended)** A process for alkylation of an aromatic hydrocarbon or isoalkane with an olefin using catalysis by a solid acid, comprising contacting a reaction material containing an aromatic hydrocarbon or C_4-C_6 isoalkane, C_2-C_{18} monoolefin and a compound containing a strongly electronegative element, which serves as an promoter, with a solid acid catalyst to carry out the alkylation, characterized in that the solid acid catalyst is contacted with a hydrogen halide prior to its contact with the reaction material, wherein said solid acid catalyst is a supported heteropoly acid catalyst, a supported or unsupported heteropoly acid salt catalyst, a supported Brönsted-Lewis conjugate solid super acid catalyst or an oxide catalyst treated with a Brönsted acid or Lewis acid ~~The process according to claim 50 or 51~~, and wherein said supported heteropoly acid catalyst consists of a porous inorganic support and a heteropoly acid, wherein the heteropoly acid is represented by the general formula: $H_{8-n}[AM_{12}O_{40}]$, wherein A represents P or Si, M represents W or Mo, and n represents the valence state of A and is 4 or 5; and wherein said supported heteropoly acid salt catalyst consists of a porous inorganic support and a heteropoly acid acid, wherein the heteropoly acid salt is represented by the general formula: $H_{8-n-mx}N_x[AM_{12}O_{40}]$, wherein N is a metal ion selected from alkali metal ions, ammonium ion, alkali earth metal ions and metal ions of Group IIIA metals, m represents the valence state of the metal ion, x is a number usable in the range $0 < mx < 4$, A represents P or Si, M represents W or Mo, and n represents the valence state of A and is 4 or 5; said porous inorganic support being a conventional porous inorganic support selected from activated carbon, silicon oxide, aluminum oxide, magnesium oxide, titanium oxide, natural or synthetic

aluminosilicate zeolite, carbon fiber and natural clay, or mixtures thereof.

53. **(Previously presented)** The process according to claim 52, wherein said porous inorganic support is silicon oxide, aluminum oxide or a mixture of them.

54. **(Currently amended)** The process according to claim 50 [[or 51]], wherein said supported Brönsted-Lewis conjugate solid super acid consists of 40 to 95 % by weight of a porous inorganic support, and 1 to 60 % by weight of a heteropoly acid and 0.3 to 15 % by weight of a Lewis acid supported on the porous inorganic support, wherein said heteropoly acid and porous inorganic support are as defined in claim [[22]] 52; said Lewis acid is selected from $AlCl_3$, BF_3 or XF_5, wherein X represents P, As, Sb or Bi.